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10/621,060	07/16/2003	Ronald van Haalen	LCNT/Van Haalen	8826

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EXAMINER

MOORE, IAN N

ART UNIT	PAPER NUMBER
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2616

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/621,060	Applicant(s) HAALEN ET AL.	
	Examiner Ian N. Moore	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7-16-03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The **title** of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: **A switch forwarding data packets from a source.**

2. The **abstract** discloses a legal phraseology "**comprises**" in lines 1, 2, and 4. Applicant is reminded of the proper language and format for an abstract of the disclosure. See MPEP § 608.01(b).

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

Drawings

3. The drawings are objected to because there is a lack of descriptive text legends for FIG. 1-11 (e.g. in FIG. 1, S1 and S2 should be labeled as Switch 1 and Switch 2, I and II should be labeled as Path I and II, A and B should be labeled as Source A and B, etc.) [see 37 CFR 1.83, CFR 1.84 [5(e)], MPEP § 608.02(e)].

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must

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be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claims 1, 2, 6 and 7 are objected to because of the following informalities:

Claim 1 recites the clause the optional language "**operable to**" in lines 7. The claim scope is not limited by claim language that suggests or makes optional but does not require steps to be performed, or by claim language that does not limit a claim to a particular structure. Applicant is suggested to revise the claim, or clarify that the steps, which follows "operable to", to be performed are required (not optional).

Claim 6 is also objected for the same reason as set forth above in claim 1.

Claim 1 recites, "to discard for a period of time any data packet originating from the source" in lines 7-9. For clarity, it is suggested to revise as "to discard any data packet originating from the source for a period of time".

Claim 1 recites, "**the** first one of the at least two incoming ports" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 is also objected for the same reason as set forth above in claim 1.

Claim 1 recites, “**the** second one of the at least two incoming ports” in line 9. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 is also objected for the same reason as set forth above in claim 1.

Claim 1 recites, “upon receiving a data packet originating from the source at the second one of the at least two incoming port”. For clarity, it is suggested to insert two commas, one at the beginning and the other end of this clause, (e.g..., upon receiving a data packet originating from the source at the second one of the at least two incoming port,...)

Claim 2,6,7 are also objected for the same reason as set forth above in claim 1.

Claim 2 recites, “**all** the at least two incoming ports” in line 3. For clarity, it is suggested to define what “all” is actually referring to although in light of the specification “all” appears to refers to “ports”.

Claim 7 is also objected for the same reason as set forth above in claim 2.

Claim 2 recites, “the second **one**” in line 3 and 4. For clarity, it is suggested to revise “one” as “port”.

Claim 7 is also objected for the same reason as set forth above in claim 2.

Claim 2 recites, “a period of time” in line 2. It is unclear whether “a period of time” is the same as “a period of time” recited in claim 1, line 7.

Claim 7 is also objected for the same reason as set forth above in claim 2.

Claim 2 recites, “a data packet” in line 4. It is unclear whether “a data packet” is the same as “a data packet” recited in claim 1, line 9.

Claim 7 is also objected for the same reason as set forth above in claim 2.

Appropriate corrections are required.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1 and 6 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,370,112 (hereinafter refers to as Voelker).

Regarding claim 1, it is noted that although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of the instant application merely broadens the scope of the claim 1 of Voelker by eliminating the elements and their functions of the claims.

In this case, both claim 1 of the instant application and claim 1 of Voelker recites Communication network comprising a source and a switch for receiving and forwarding data

packets originating from the source, wherein the network comprises (see Voelker claim 1, line 15-20):

at least two mutually different routing paths between the source and the switch, wherein the switch comprises at least two incoming ports for receiving the data packets originating from the source (see Voelker claim 1, steps a-c),

the switch operable to discard for a period of time any data packet originating from the source at the first one of the at least two incoming ports upon receiving a data packet originating from the source at the second one of the at least two incoming ports after receiving a data packet originating from the source at the first one of the at least two incoming ports (see Voelker, claim 1, steps d-g):

Regarding claim 6, it is noted that although the conflicting claims are not identical, they are not patentably distinct from each other because claim 6 of the instant application merely broadens the scope of the claim 1 of Voelker by eliminating the elements and their functions of the claims. Thus, claim 6 is also rejected for the same reason as set forth above in claim 1 since they both contain the same inventive limitations.

In view of this, it is noted that allowing the claim 1 and 6 of the instant application would result in an unjustified or improper timewise extension of the “right to exclude” granted by a patent.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Almay (US005809011A) in view of Soirinsuo (US006028861A).

Regarding Claim 1, Almay discloses communication network (see FIG. 1, packet switch communication network) comprising a source (see FIG. 1, subscriber A) and a switch (see FIG. 1, 3, Node B) for receiving and forwarding data packets originating from the source (see col. 2, line 36-55; receiving and forwarding/routing packets/cells from the subscriber A), wherein the network comprises:

at least two mutually different routing paths (see FIG. 1, paths a-b and A-B) between the source and the switch (see FIG. 1, between subscriber A and Node B; see col. 2, line 34-55), wherein the switch comprises at least two incoming ports for receiving the data packets originating from the source (see FIG. 1, two input interfaces (i.e. first interface from a-b path and another interface from A-B path) for receiving the packets/cells from subscriber A; see col. 2, line 38-67; see col. 4, line 20-35),

the switch operable to wait/hold for a period of time any data packet originating from the source at the first one of the at least two incoming ports (see FIG. 2, col. 2, line 56 to col. 3, line 10; deactivating/ceasing packets/cells from subscriber A at the first interface a-b for predetermined period), upon receiving a data packet originating from the source at the second one of the at least two incoming ports (see FIG. 2, when receiving packets/cells from subscriber A at the second interface A-B; see col. 3, line 1-60), after receiving a data packet originating from the source at the first one of the at least two incoming ports (see FIG. 1,2, after receiving

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cells/packets from the subscriber A at the first interface a-b; see col. 2, line 35-66; see col. 3, line 30 to col. 4, line 20).

Almay does not explicitly disclose discard. However, discarding packets/cells/frames at the failed/inactive port/interface in order to maintain network intergraty is so well know in the art. In particular, Soirinsuo teaches the switch (see FIG. 8, 11, Switch) operable to discard for a period of time any data packet originating from the source (see FIG. 8, 11, ingress 804 source) at the first one of the at least two incoming ports (see FIG. 8, 11, first/normal connection/port; see col. 9, line 40-45; see col. 10, line 10-30; discarding all cells received from first/normal connection/port from the input source during switch-over interval/time), upon receiving a data packet originating from the source at the second one of the at least two incoming ports (see col. 10, line 25-30; when all input cells coming from a new connection/port), after receiving a data packet originating from the source at the first one of the at least two incoming ports (see col. 9, line 40-45; see col. 10, line 10-30; after receiving cells from the input source at first channel connection/port).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide discarding, as taught by Soirinsuo in the system of Almay, so that it would provide synchronize switchover and prevent frame integrity; see Soirinsuo col. 3, line 65 to col. 4, line 65.

Regarding Claim 6, Almay discloses switch (see FIG. 1, 3, Node B) for use in communication network (see FIG. 1, packet switch communication network) comprising a source (see FIG. 1, subscriber A) and, when the switch in use, at least two mutually different routing paths (see FIG. 1, paths a-b and A-B) between the source and the switch (see FIG. 1,

between subscriber A and Node B; see col. 2, line 34-55), wherein the switch is arranged to receive and forward data packets originating from the source (see col. 2, line 36-55; receiving and forwarding/routing packets/cells from the subscriber A), wherein the switch comprises:

at least two incoming ports for receiving the data packets originating from the source (see FIG. 1, two input interfaces (i.e. first interface from a-b path and another interface from A-B path) for receiving the packets/cells from subscriber A; see col. 2, line 38-67; see col. 4, line 20-35),

the switch operable to wait/hold for a period of time any data packet originating from the source at the first one of the at least two incoming ports (see FIG. 2, col. 2, line 56 to col. 3, line 10; deactivating/ceasing packets/cells from subscriber A at the first interface a-b for predetermined period), upon receiving a data packet originating from the source at the second one of the at least two incoming ports (see FIG. 2, when receiving packets/cells from subscriber A at the second interface A-B; see col. 3, line 1-60), after receiving a data packet originating from the source at the first one of the at least two incoming ports (see FIG. 1,2, after receiving cells/packets from the subscriber A at the first interface a-b; see col. 2, line 35-66; see col. 3, line 30 to col. 4, line 20).

Almay does not explicitly disclose discard. However, discarding packets/cells/frames at the failed/inactive port/interface in order to maintain network integrity is so well know in the art. In particular, Soirinsuo teaches the switch (see FIG. 8, 11, Switch) operable to discard for a period of time any data packet originating from the source (see FIG. 8, 11, ingress 804 source) at the first one of the at least two incoming ports (see FIG. 8, 11, first/normal connection/port; see col. 9, line 40-45; see col. 10, line 10-30; discarding all cells received from first/normal

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connection/port from the input source during switch-over interval/time), upon receiving a data packet originating from the source at the second one of the at least two incoming ports (see col. 10, line 25-30; when all input cells coming from a new connection/port), after receiving a data packet originating from the source at the first one of the at least two incoming ports (see col. 9, line 40-45; see col. 10, line 10-30; after receiving cells from the input source at first channel connection/port).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide discarding, as taught by Soirinsuo in the system of Almay, so that it would provide synchronize switchover and prevent frame integrity; see Soirinsuo col. 3, line 65 to col. 4, line 65.

Regarding Claims 2 and 7, Almay discloses switch (see FIG. 1, 3, Node B) the switch operable to deactivate/cease for a period of time any data packet originating from the source at all the at least two incoming ports apart from the second one (see FIG. 2, col. 2, line 56 to col. 3, line 10; deactivating/ceasing packets/cells from subscriber A at the first interface a-b or other interfaces (since ATM node can have more than two interfaces, see Almay col. 5, line 1-16) apart/except from second interface A-B for predetermined period), upon receiving a data packet originating from the source at the second one of the at least two incoming ports (see FIG. 2, when receiving packets/cells from subscriber A at the second interface A-B; see col. 3, line 1-60), after receiving a data packet originating from the source at the first one of the at least two incoming ports (see FIG. 1,2, after receiving cells/packets from the subscriber A at the first interface a-b; see col. 2, line 35-66; see col. 3, line 30 to col. 4, line 20).

Almay does not explicitly disclose discard. However, discarding packets/cells/frames at the failed/inactive port/interface in order to maintain network integrity is so well know in the art. In particular, Soirinsuo teaches the switch (see FIG. 8, 11, Switch) operable to discard for a period of time any data packet originating from the source (see FIG. 8, 11, ingress 804 source) at all the at least two incoming ports apart from at the second one (see FIG. 8, 11, first/normal connection/port; see col. 9, line 40-45; see col. 10, line 10-30; discarding all cells received from first/normal and other connection/port except second connection/port (i.e. all ports except second one) from the input source during switch-over interval/time), upon receiving a data packet originating from the source at the second one of the at least two incoming ports (see col. 10, line 25-30; when all input cells coming from a new connection/port), after receiving a data packet originating from the source at the first one of the at least two incoming ports (see col. 9, line 40-45; see col. 10, line 10-30; after receiving cells from the input source at first channel connection/port).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide discarding, as taught by Soirinsuo in the system of Almay, so that it would provide synchronize switchover and prevent frame integrity; see Soirinsuo col. 3, line 65 to col. 4, line 65.

Regarding Claims 3 and 8, Almay discloses the period of time lasts till the switch is informed that re-ordering of the data packets originating from the source is no longer possible (see col. 3, line 1-50; predefined period is defined such that ordering of packets at the new route connection that transmit cells/packets from possible and not disrupted. Since the predefined time

last until the “ordering” of packet is “possible/not-disrupted”, and thus “re-ordering” of packets are “not possible/disrupted”).

Regarding Claims 4 and 9, Almay discloses the period of time has a predetermined length of time (see FIG. 2, col. 2, line 56 to col. 3, line 10; deactivating/ceasing packets/cells from subscriber A at the first interface a-b for predetermined period). Soirinsuo also discloses the period of time has a predetermined length of time (see FIG. 8, 11, first/normal connection/port; see col. 9, line 40-45; see col. 10, line 10-30; discarding all cells received from first/normal connection/port from the input source during switch-over interval/time).

9. Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Almay in view of Soirinsuo as applied to claims 1 and 6 above, and further in view of Merchant (US006535489B1).

Regarding Claims 5 and 10, the combined system of Almay and Soirinsuo discloses the communication network as set forth above in claims 1 and 6.

Neither Almay nor Soirinsuo explicitly disclose an Ethernet Network. However, utilizing Ethernet 802.3 network is well known in the art in order to provide a standard connection for interoperability. In particular, Merchant discloses an Ethernet network (see FIG. 1, Ethernet 802.3 network; see col. 3, line 45-65).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Ethernet network, as taught by Merchant, in the combined system of Almay and Soirinsuo, so that it would enable selectively forwarding data packets to appropriate destination based on Ethernet protocol; see Merchant col. 3, line 60-65.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian N. Moore whose telephone number is 571-272-3085. The examiner can normally be reached on 9:00 AM- 6:00 PM.

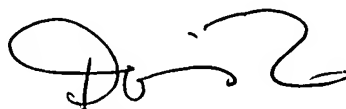
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 571-272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ian N. Moore
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gnm

5/19/07



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